

RECEIVED
CENTRAL FAX CENTER

FEB 17 2009

Amendments to the Specification:

As shown below, please:

following paragraph [0017], add new paragraphs [0017.01] to [0017.06];

amend paragraph [0048.5.2]; and

following amended paragraph [0048.5.2], add new paragraph [0048.5.3].

[0017.01] In one preferred embodiment, as shown in FIG. 8, the inference engine can resolve relationship rules that are in conflict, or are not fully consistent. For example,

Rule 1: If a student is weak in algebra, then the student is weak in geometry.

Rule 2: If a student is weak in geometry, then the student is weak in trigonometry.

The inference engine, based on rules 1 and 2, derives Rule 3:

Rule 3: If a student is weak in algebra, the student must be weak in trigonometry. Conversely, if a student is strong in trigonometry, the student must be strong in algebra.

Rule 4: A student strong in trigonometry may not be strong in algebra. The derived rule 3 is in conflict with rule 4. Then, the inference engine derives and adds the following rule as one of the relationship rules:

Rule 5: If a student is strong in trigonometry, but there is no data, latest or prior-to-the-latest, to show the student's ability in algebra, the student should work on algebra next. In the future, this new rule takes precedence over the conflicting rules. With rule 5 applied before rules 1 and 2, rule 3 will not be derived.

[0017.02] Another way to resolve the conflict is to reshuffle the order of application of the rules. For the above example, one way to resolve the conflict between rule 4 and rule 3 is to apply rule 4 before applying rules 1 and 2.

[0017.03] In another preferred embodiment, the inference engine can resolve one or more relationship rules in conflict with the contents in a test results table, such as overall scores. In one preferred embodiment, rules in conflict are disabled. For example, with the above rule 1 to rule 3 still active:

FEB 17 2009

The student's overall scores indicate that the student is strong in trigonometry, but weak in algebra. Such scores are in conflict with rule 3. Under such a situation, the inference engine would disable rule 1 for this student. Without rule 1, the engine will not be able to derive rule 3, and there will be no rules in conflict with the overall scores.

[0017.04] Reshuffling the rules, such as rules 1, 2 and 4 above, can also resolve the conflict among the rules and the contents in the test results table, such as the overall scores.

[0017.05] Another preferred way to resolve conflicts is to associate a credit with each rule. The credit is advanced by a certain amount if its corresponding rule is used to generate a recommendation. However, the credit of a rule is decremented by another amount if the rule is found to be in conflict with another rule or with the contents in the test results table. In one preferred embodiment, the increment and the decrement amount are the same. In another preferred embodiment, either the increment or the decrement amount is zero. The order of application of rules is based on the credits of the rules--a rule with a larger credit is applied before a rule with a smaller credit.

[0017.06] Yet another preferred approach to resolve a conflict with the contents in the test results table is to add a new rule, which has precedence over non-new rules. Based on the above example, to prevent conflict with rules 1-3, the following new rule is added:

If a student is strong in trigonometry, but weak in algebra, the student should work on algebra.

[0048.5.2] However, those skilled in the art will readily appreciate that the detailed description given herein with respect to the figures is for explanatory purposes as the invention extends beyond these limited embodiments. FIG. 8 shows another embodiment of the present invention.

[0048.5.3] However, those skilled in the art will readily appreciate that the detailed description given herein with respect to the figures is for explanatory purposes as the invention extends beyond these limited embodiments.